

December 14, 2010

The Honorable Jerry Farrell, Jr.
Commissioner
Department of Consumer Protection
165 Capitol Ave.,
Hartford, CT
06106

Re: Comments on the Department of Consumer Protection concerning Well Drilling and Geexchange Systems Sections 25-128-33 through 25-128-64.

Dear Sir,

The Department of Consumer Protection is to be commended for again undertaking the arduous task of writing the regulations pertaining to the drilling, siting, and regulating the development of geothermal wells in the State of Connecticut. As Chairman of the CT Section AWWAs Regulation and Research Committee please accept the following comments on the proposed regulations.

In Section 25-128-36 (10) Definitions, Fluids which have been approved for use by the Department for closed loop systems as set forth in 12-128-39b should only be allowed in a closed loop system without the use of makeup water either from a potable water system or a groundwater well. The use of R-134A etc in a closed loop system could pose a risk of contamination of the ground water if in the vicinity of a private or public water supply well. Additional provisions for the monitoring to the fluids pressure or the volume of fluids in the closed loop system must be provided to ensure that the material does not leak into the surrounding ground water leading to aquifer contamination.

In Section 25-128-36 (33) Definitions – “Repair” The repair of a geothermal well with the subsequent disinfection of the well, may need to be a permitted practice, administered by the local health department. The discharge of highly chlorinated water from the disinfected well, may need to be treated to comply with current practice to reduce the chlorine level in such discharge to prevent environmental situations.

In Section 25-128-36 (37) Definitions – Water wells; The definition of water wells for the purposes of obtaining or providing water for drinking purposes should reference existing regulations (RCSA 19-13-B51b(1)). An open loop geoexchange bore hole should be defined whereas the proposed geoexchange bore holes definition as proposed in 25-128-36 (16) states that the geoexchange system shall be “fitted with a closed-loop heat exchange piping per section 25-12839b”, which does not include an open loop system

In Section 25-128-40 (g), the section reads that any connection between a geoexchange system and a domestic water supply shall include a reduced pressure backflow preventer. The section should be in agreement with current regulations which govern private wells utilized for the purpose of lawn irrigation and or fire services while the domicile is connected to a public water supply. Any connection to a potable water source should be prohibited and a cross connection device when installed on the geothermal well should be registered with the local public water system or in the absence of a public water system the local health department and subject to the testing requirement of such devices.

In Section 25-128-41 Location and protection of wells, the location of the geothermal well upon premises should be subject to approval by the local health officer of the municipality in which said premises are located and if the premises are supplied by a public water system then the public water company must also be notified as per RSCA 19a-37a(5). The separation distances of a geothermal well from a public or private drinking water well should be at least the minimum distance as currently required under RCSA 19-13-B51d.

The separation of a geothermal well from a septic system should also meet with the minimal requirements of separation from a septic leach field for residential systems of 75 feet.

Again if the residence is supplied by a public water system then the geothermal system then the geothermal well must have a backflow device install and no physical interconnection between the geothermal well and the public water system should be allowed.

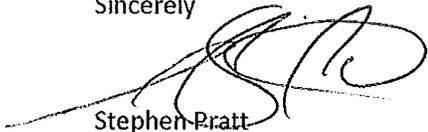
The utilization of an open loop geothermal well which discharges into a surface water source poses the risk of contamination or adversely affecting the water chemistry of the receiving water body and or the aquatic environment of the surface water impoundment. The temperature of the discharge water may result in the elevation of the receiving water which could affect the flora and fauna of the surface source.

In areas of existing or prior manufacturing practices ground water contamination is a distinct possibility which when coupled with withdrawals for the geothermal system and discharging into a surface water

receiving impoundment could lead to migration of the contamination. In areas of existing or prior manufacturing, dry cleaning, service stations etc and environment impact assessment should be conducted to adequately assess the impact of a geothermal system.

As chairman of the CT Section AWWA – Regulation and Research Committee we are in support of the intent of the proposed regulations and look forward to working with the Department of Consumer Protection in the implementation of the regulations.

Sincerely

A handwritten signature in black ink, appearing to read 'Stephen Pratt', written over a horizontal line.

Stephen Pratt
Chairman, CT Section AWWA
Regulation and Research Committee
90 Sargent Drive
New Haven CT
06511

Cc: William Kennedy, MDC